List of Publications on PULP AND PAPER

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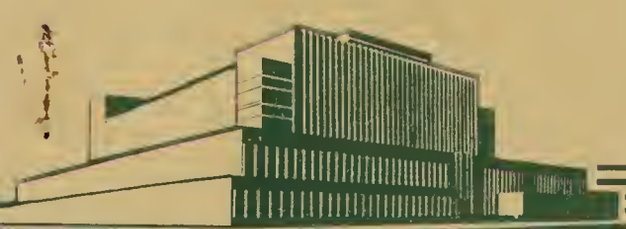

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MADISON 5, WISCONSIN

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
In Cooperation with the University of Wisconsin

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*2122 Experiments on the groundwood and sulfite pulping of subalpine fir, by Axel Hyttinen, E. L. Keller, and E. R. Schafer. 1958.

*2138 Pulping of mesquite, manzanita, and snowbrush, by J. F. Laundrie. 1958.

*2162 Continuous cold soda pulping of west coast red alder, tanoak, madrone, and bigleaf maple, by J. F. Laundrie. 1959.

*2175 Groundwood pulping of white fir and corkbark fir, by Axel Hyttinen and E. R. Schafer. 1959.

*2180 Pulping and papermaking experiments on quaking aspen from Colorado, by Axel Hyttinen, J. S. Martin, and E. L. Keller. 1960.

*2181 Pulping and papermaking experiments on redwood, by J. S. Martin, F. A. Simmonds, and D. J. Fahey. 1960.

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*2012 Pulping of Latin-American woods, by G. H. Chidester and E. R. Schafer. Inf. Rev. & Reaf. Nov. 1959.

*2013 Use of bleached cold soda pulps from certain mixtures of Latin-American hardwoods in newsprint, by G. H. Chidester and K. J. Brown. Inf. Rev. & Reaf. 1959.

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*2124 Pulping and papermaking experiments on insignis pine (Pinus radiata). 1958.

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*2127 Neutral sulfite semichemical pulping of guaba (inga vera), yagrumo hembra (Cecropia peltata), and eucalyptus (Eucalyptus robusta) from Puerto Rico, by E. L. Keller, R. M. Kingsbury, and D. J. Fahey. 1958.

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*212 American woods for papermaking.

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Journal Articles

*Bleaching semichemical pulp, by F. A. Simmonds and R. M. Kingsbury. TAPPI Monog. No. 10, pp. 179-196, 1953.

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Bleaching aspen neutral sulfite semichemical pulp with sodium peroxide, by R. M. Kingsbury, F. A. Simmonds, R. T. Mills, and F. L. Fennell. Paper Trade Jour., Sept. 12, 1946.

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*Sulfite pulps and papers from sawdust and chip mixtures, by E. L. Keller and J. N. McGovern. Pulp & Paper Mag. of Canada, June 1947.

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*1666-9	Wood flour, by L. H. Reineke. 1956.
*1666-21	Board materials from wood waste. 1954.

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Wood: Colors and Kinds. U. S. Dept. Agr. Handbook No. 101. Oct. 1956. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price 50 cents.

Pulp, paper, and board industry report. Issued quarterly by the Office of Domestic Commerce, U. S. Dept. of Commerce, Washington 25, D. C. 75 cents per year from Superintendent of Documents, Government Printing Office, Washington 25, D. C.

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Greater pulp yields per acre per year, by H. L. Mitchell.
Pulpwood storage problems, by R. M. Lindgren.
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Overlaid lumber--a composite product of paper and wood, by R. J. Seidl.

Principles of package cushioning, by R. E. Jones.

*Wood resources, by E. G. Locke and K. G. Johnson. Ind. Eng. Chem. 46(3):478-483, Mar. 1954.

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*New and improved paper products, by G. H. Chidester. The Paper Indus., 35(9):1,002-1,005, Dec. 1953.

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*1698 The U. S. Forest Products Laboratory, by F. J. Champion. 1960.

*1972 Wood--A simple explanation, what it is, and how we use it, by F. J. Champion. 1960.

Technical Notes

*240 A hundred definitions pertaining to wood and other forest products.

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(Publications listed in this section are designated (a) if of limited interest, (b) superseded by later material, and (c) if of historical value.)

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Morphology of cellulose fibers as related to the manufacture of paper, by G. J. Ritter. Paper Trade Jour., Oct. 31, 1935. (b)

Application of elementary statistical methods in the testing of pulp and paper, by F. A. Simmonds and R. H. Doughty. Paper Trade Jour., Dec. 21, 1933. (c)

Proposed methods for the dirt count of pulp and paper, by F. A. Simmonds, P. S. Billington, and P. K. Baird. Paper Trade Jour., July 27, 1933. (c)

Further studies on ground wood evaluation, by E. R. Schafer and M. Heinig. Paper Trade Jour., Sept. 3, 1931. (c)

Journal Articles (continued)

Ground wood pulp evaluation: By means of static bending, screen analysis, and rate of flow tests, by E. R. Schafer and L. A. Carpenter. Paper Trade Jour., July 17, 1930. (c)

Rate of flow test for evaluating ground wood pulp, by L. A. Carpenter and E. R. Schafer. Paper Trade Jour., July 1930; TAPPI Papers, May 1930. (c)

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Methods used at the Forest Products Laboratory for the chemical analysis of pulps and pulpwoods, by M. W. Bray. Paper Trade Jour., Dec. 20, 1928. (a)

Chemical analysis of the fractions obtained by screening blackgum and slash pine groundwood pulp, by M. Santaholma and E. R. Schafer. Paper Trade Jour., Nov. 9, 1933. (a, c)

A comparison of four methods for the determination of lignin, by P. S. Billington, F. A. Simmonds, and P. K. Baird. Paper Trade Jour., Jan. 26, 1933. (b, c)

Determination of cellulose and amount of chlorine consumed in its isolation: A short method, by M. W. Bray. Indus. & Eng. Chem., Jan. 15, 1929. (b, c)

Chemistry of the cellulose determination, by C. E. Peterson and M. W. Bray. Indus. & Eng. Chem., Nov. 1928. (b, c)

Improved method for the determination of alpha, beta, and gamma cellulose, by M. W. Bray and T. M. Andrews. Indus. & Eng. Chem., Apr. 1923. (b, c)

Comparison of wood cellulose and cotton cellulose, by S. A. Mahood and D. E. Cable. Indus. & Eng. Chem., Aug. 1922. (c)

Chemical constitution of soda and sulfate pulps from coniferous woods and their bleaching qualities, by S. D. Wells. Indus. & Eng. Chem., Oct. 1921. (c)

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Comparative resistance to vapor transmission of commercial building papers, by M. Heinig, L. V. Teesdale, and C. E. Curran. Paper Indus. & Paper World, Apr. 1939; TAPPI Papers, 22, 1939. (a)

Significant sheet properties for developing specifications for various papers and paperboards, by P. K. Baird. Paper Trade Jour., Jan. 11, 1934.

Sorption of water vapor by paper-making materials:
- Part 1. Effect of beating, by C. O. Seborg and A. J. Stamm. Indus. & Eng. Chem., Nov. 1931. (c)
- Part 3. Hysteresis in the sorption of water vapor by paper-making materials, by C. O. Seborg. Indus. & Eng. Chem., Feb. 1937. (a)

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The volumetric composition of paper: (a)
- Part 1. The determination of the volumetric composition of paper, by P. K. Baird and C. E. Hrubesky. Paper Trade Jour., July 24, 1930.
- Part 2. Determination of the solid fraction of simple papers, by P. S. Billington and C. E. Hrubesky. Paper Trade Jour., Aug. 13, 1931.
- Part 3. Fiber substance density of pulps and papers, by P. S. Billington and E. L. Keller. Paper Trade Jour., Aug. 13, 1931.
- Part 4. Composition of the air fraction: Improved apparatus and method for determining porosity, by R. H. Doughty, C. O. Seborg, and P. K. Baird. Paper Trade Jour., June 16, 1932.
- Part 5. Composition of the air fraction: The effect of solid fraction and thickness of the porosity of air transmissibility of simple papers, by C. O. Seborg, R. H. Doughty, and P. K. Baird. Paper Trade Jour., Sept. 29, 1932.

A survey of the drying of paper and cellulosic paper-making materials, by F. A. Simmonds. Paper Trade Jour., May 18, 1933. (c)

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Use requirements of paper for the printing industry, by P. K. Baird. Proc. 3rd Conf. of Tech. Experts in the Printing Industry. Mar. 14, 1932. (c)

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Effect of fiber-size distribution on the properties of hardboards made from fiberized water-soaked Douglas-fir, by S. L. Schwartz and P. K. Baird. Paper Trade Jour., Vol. 130, No. 24, June 15, 1950. (a)

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Influence of moisture on tests of container boards, by S. D. Wells. Paper Indus., Dec. 1922. (c)

Effect of varying humidities on strength of fiberboard and its component plies, by Otto Kress and G. C. McNaughton. Paper, May 22, 1918. (c)

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A mill scale demonstration of temperature control in sulfite pulping, by G. H. Chidester. Paper Trade Jour., Oct. 11, 1928. (c)

Temperature schedule in sulfite pulping, by W. H. Swanson. Paper Trade Jour., Nov. 25, 1926. (c)

Chemistry of the sulfite process: (a)

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Part 2. Chemical properties of pulps prepared by indirect cooking, by M. W. Bray and T. M. Andrews. Paper Trade Jour., Jan. 18, 1932.

Part 3. Reactions of the calcium base, by R. N. Miller and W. H. Swanson. Paper Trade Jour., Apr. 13, 1923.

Part 4. Distribution of sulfur during the cook, by R. N. Miller and W. H. Swanson. Paper Trade Jour., Apr. 13, 1923.

Part 5. Effect of various compositions of acid upon yield and quality of pulp, by R. N. Miller and W. H. Swanson. Paper Trade Jour., Oct. 11, 1923.

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Part 7. Effects producible by variation in pressure, by R. N. Miller and W. H. Swanson. Paper Trade Jour., Oct. 16, 1924.

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Chemistry of the alkaline wood pulp process: (a)
- Part 1. Aspen, loblolly pine, and jack pine by the soda process, by S. D. Wells, R. H. Grabow, and J. A. Staidl. Paper Trade Jour., Apr. 13, 1923.
- Part 2. Effect of temperature on the rate of hydrolysis of spruce wood with sodium hydroxide, by M. W. Bray. Paper Trade Jour., Dec. 6, 1929.
- Part 3. Pulping of white pine by the soda and soda sulfur processes, by M. W. Bray, J. S. Martin, and L. A. Carpenter. Paper Trade Jour., Sept. 17, 1931.

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Distribution of methoxyl in the products of cooking jack pine by the soda process, by S. S. Aiyar. Indus. & Eng. Chem., July 1923. (c)

Influence of sulfur in the cooking of jack pine by the sulfate process, by S. D. Wells. Pulp & Paper Mag. of Canada, June 21, 1923. (c)

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Chemistry of pulps: Comparison of the chemical changes of jack pine and aspen woods cooked by the soda process, by M. W. Bray and T. M. Andrews. Paper Trade Jour., May 10, 1923. (c)

Consumption of chemicals by the sulfate process: Results of experiments to determine the consumption of chemicals in pulping of unbarked wood by the kraft process, by Otto Kress and C. K. Textor. Paper, July 26, 1916. (c)

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The grinding of spruce for mechanical pulp, by J. H. Thickens. Forest Products Laboratory Series, FS Bull. 127, U.S. Dept. Agr., July 12, 1913 (out of print). (b, c)

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Improved pulpwood grinder for experimental work, by E. R. Schafer and J. C. Pew. Paper Trade Jour., June 20, 1935. (c)

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*1418 Chemical properties of white spruce pulp prepared by the use of phenol, by P. S. Billington and E. L. Fiedler. Inf. Rev. & Reaf. Mar. 1956. (a)

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Utilization of hardwoods for pulp and paper, by C. E. Curran. Paper Trade Jour., Jan. 17, 1929. (c)

Eastern and Northern Softwoods

Journal Articles

Comparative pulping value of Russian and Canadian spruce by the sulfite process, by W. H. Monsson and G. H. Chidester. Paper Trade Jour., Feb. 11, 1932. (c)

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Part 1. The effect of varying the time and temperature of impregnation, by W. H. Monsson and G. H. Chidester. Paper Trade Jour., Nov. 15, 1928.
Part 2. The effect of different types of temperature curves, by W. H. Monsson and G. H. Chidester. Paper Trade Jour., Oct. 16, 1930.

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Contributions of Forest Products Laboratory research to southern pulp and paper developments, by C. P. Winslow. American Paper & Pulp Association Monthly Review, May-June 1939. (c)

Frontiers of the Southern pulping industry, by C. E. Curran. Presented to Mississippi Farm Chemurgic Council, Apr. 12-14, 1937. (c)

Pulps and papers from southern woods, by C. P. Winslow. Mfrs. Record, Mar. 24 and 31, 1932. (c)

Southern woods for paper pulp, by P. K. Baird. Newsprint Service Bureau Bull. 168, Jan. 15, 1932. (c)

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Heartwood in second-growth southern pine, by B. H. Paul. South Lbrmn., Oct. 1, 1930. (c)

Present and future trends in the pulping of southern woods, by C. E. Curran. Paper Trade Jour., Jan. 16, 1930. (c)

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Pulping flax straw: (c)

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Part 5. Production of pulp by the chlorine process, by E. R. Schafer and C. E. Peterson. Paper Trade Jour., Oct. 18, 1928.

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New methods of cooking straw for strawboard, by J. D. Rue and W. H. Monsson. Paper Trade Jour., Oct. 8 and Nov. 12, 1925. (c)

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Bleaching

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OTHER PUBLICATION LISTS ISSUED BY THE FOREST PRODUCTS LABORATORY

The following lists of publications which deal with other investigative projects of the Forest Products Laboratory are obtainable upon request:

Boxing and Crating--Strength and serviceability of shipping containers, methods of packing.

Building Construction Subjects--Partial list of Government publications of interest to architects, builders, retail lumbermen, and engineers.

Chemistry of Wood and Derived Products--Chemical properties and uses of wood and chemical wood products, such as turpentine, alcohol, and acetic acid.

Fire Protection--Fire test methods, fire retarding chemicals and treatments and fire behavior of treated and untreated wood, wood products, and wood structures.

Fungus Defects in Forest Products--Decay stains, and molds in timber, buildings, and various wood products; antiseptic properties of protective materials.

Furniture Manufacturers, Woodworkers and Teachers of Wood Shop Practice--Partial list of publications for growth, structure, and identification of wood; moisture content, physical properties, air seasoning, and kiln drying; grading, manufacturing, and waste utilization; strength and related properties and joints and fastenings; glues and gluing; veneer and plywood fabrication; box and crate construction and packaging data.

Glue and Plywood--Development of waterproof glues, preparation and application of various glues, plywood manufacturing problems.

Growth, Structure, and Identification of Wood--Structure and identification of wood; the effect of cellular structure of wood on its strength, shrinkage, permeability, and other properties; the influence of environmental factors, such as light, soil moisture, and fire, on the quality of wood produced; and secretions of economic value produced by trees and their exploitation.

Logging, Milling, and Utilization of Timber Products--Methods and practices in the lumber-producing and wood-consuming industries; standard lumber grades, sizes, and nomenclature; production and use of small dimension stock; specifications for small wooden products; uses for little-used species and commercial woods, and low-grade and wood-waste surveys.

Mechanical Properties of Timber--Strength of timber and factors affecting strength; design of wooden articles or parts where strength or resistance to external forces is of importance.

Seasoning of Wood--Experimental and applied kiln drying, physical properties, air drying, steam bending.

Structural Sandwich, Plastic Laminates, and Wood-Base Aircraft Components--Strength, selection, and character of aircraft wood, plywood, and wood and composite laminated and sandwich materials; fabrication and assembly problems; methods of calculating the strength.

Wood Finishing Subjects--Effect of coatings in preventing moisture absorption; painting characteristics of different woods, and weathering of wood.

Wood Preservation--Preservative materials and methods of application; durability and service records of treated and untreated wood in various forms.

Note: Since Forest Products Laboratory publications are so varied in subject matter no single big list is issued. Instead a list is made up for each Laboratory division. Twice a year, December 31 and June 30, a list is made up showing new reports for the previous 6 months. This is the only item sent regularly to the Laboratory's mailing list. Anyone who has asked for and received the proper subject lists and who has had his name placed on the mailing list, can keep up to date on Forest Products Laboratory publications. Each subject list carries descriptions of all other subject lists.

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